



# **WEST Search History**

DATE: Monday, September 15, 2003

Set Name side by side		Hit Count	Set Name result set
DB = USPT, PGPB, JPAB, EPAB, DWPI, TDBD; PLUR = YES; OP = ADJ			
L9	L8 and @AD<20000825	· 12	L9
L8	client same designer same server same manager	28	L8
L7	client same designer same server	453	L7
L6	L4 and (relevant near8 (document or file))	1	L6
L5	L4 and (relevant near8 (user or member))	0	L5
L4	L3 and @AD<20000825	24	L4
L3	L2 and l1	44	L3
L2	(automatic or automatically) near8 (deliver or delivering or distributing or distribute or notify or notifying)	17716	L2
L1	(group adj3 work) or groupwork	3173	L1

END OF SEARCH HISTORY

# WEST

# Generate Collection

L4: Entry 23 of 24

File: DWPI

Jun 15, 1999

DERWENT-ACC-NO: 1999-394029

DERWENT-WEEK: 199933

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TITLE: Automatic distributing method of shared data object through e-mail in multi-user

environment

Basic Abstract Text (4):

ADVANTAGE - A work group solution for enabling work group without restricting how each individual user couples his or her work or interfering in how work group members

connect to each other is obtained.

PF Application Date (1):

19940404

PF Application Date (2):

19960930

Standard Title Terms (1):

AUTOMATIC DISTRIBUTE METHOD SHARE DATA OBJECT THROUGH MAIL MULTI USER ENVIRONMENT



# WEST

Generate Collection

L4: Entry 16 of 24

File: USPT

Jul 20, 1993

DOCUMENT-IDENTIFIER: US 5228449 A

TITLE: System and method for detecting out-of-hospital cardiac emergencies and

summoning emergency assistance

# Application Filing Date (1): 19910122

# Brief Summary Text (25):

It is also an object of the present invention to provide a system for monitoring the physiological condition of a user which includes monitor means, designed to be worn on the user's arm, for detecting a physiological condition and transmitting periodic wireless signals representing the condition, and a base unit which receives the signals and has a mechanism for automatically delivering a message to a remote location using a public communications network when appropriate.

# Detailed Description Text (57):

Although the basic base unit 4 accommodates one wrist unit 2, special base units 4 with multiple wrist unit storage areas 72, wrist unit battery rechargers 74, and battery charge indicators 76 can also be constructed for group living or work situations. These base units 4 will be made compatible with multiple wrist units 2 but the RF transmissions of each wrist unit 2 will be individually coded so that the base unit 4 can identify the originating wrist unit 2. Thus, the base unit 4 can independently determine the status of each wrist unit 2 and can take individualized appropriate action when a trouble signal is received from a wrist unit. For example, there may be different telephone numbers to be called or announcements to be made depending on the identity of the user wearing a particular wrist unit. In cases where wrist units 2 with significant RF transmitter range are provided, it may be desirable to code these transmissions for identification of the specific wrist unit 2 to prevent a person's wrist unit 2 from inadvertently activating a neighbor's base unit. In this way, a wrist unit 2 can be made to activate only a base unit 4 with which it is associated. Any of numerous methods known in the art for encoding transmissions for these purposes could be used. When coding schemes are used, the base unit 4 will be provided with a selection circuit for selecting, using the base unit keypad or some switching mechanism, the codes of wrist units 2 that the base unit 4 should respond to. There will also be provided a detection circuit for identifying the codes in incoming transmissions and comparing them to the selected codes. When the incoming code is not one which the base unit 4 has been programmed to respond to, the base unit 4 will not process the incoming signal further; in other words, the base unit 4 will not operate in the normal manner to respond to a signal of a non-associated wrist unit 2.

## CLAIMS:

1. A system for monitoring the physiological condition of a user and alerting people to a user physiological condition problem, comprising:

monitor means for monitoring physiological condition of the user and transmitting signals indicative of said physiological condition, said monitor means worn on the body of said user and portable, said monitor means including:

sensing means selectively actuated by said monitor means for sensing the physiological condition of said user; and

transmitting means actuated by said monitor means for transmitting at least one wireless signal indicative of the second physiological condition of said user;

base unit means for receiving said wireless signals from said transmitting means associated with said monitor means and analyzing said signals to determine the



existence of said user physiological condition problem, said base unit means physically separate from said monitor means;

message delivery means adapted for connection to a communications network and associated with and actuated by said base unit means for <u>automatically delivering</u> at least one message indicative of said user physiological condition problem on said communications network for summoning emergency assistance when said wireless signals indicative said user physiological condition problem.

- 3. The system of claim 2 wherein the base unit means includes sound producing means for automatically delivering at least one audible message to at least one location remote from the base unit means via the message delivery means through said communications network.
- 5. A system for monitoring the heart condition of a user and alerting people to a user heart condition problem, comprising:

monitor means for monitoring heart function of a user and transmitting signals indicative of said heart function, said monitor means worn on the body of said user and portable, said monitor means comprising sensing means actuated by said monitor means for sensing the heart condition of said user and transmitting means actuated by said monitor means for transmitting at least one wireless signal indicative of the sensed heart condition of said user;

base unit means for receiving said wireless signal from said transmitting means and selectively providing an indication output in response to said wireless signal, said base unit means physically separate from said monitor means; and

message delivery means adapted for connection to a communications network and associated with and actuated by said base unit means for <u>automatically delivering</u> at least one message indicative of said user heart condition problem on said communications network when said wireless signals indicative said user heart condition problem.

- 7. The system of claim 6 wherein the base unit means includes sound producing means for <u>automatically delivering</u> at least one audible message to at least one location remote from the base unit means via the message delivery means through said telephone network.
- 9. A system for monitoring the heart condition of a user and alerting people to a user heart condition problem, comprising:

monitor means for monitoring heart function of a user and transmitting signals indicative of said heart function, said monitor means worn on the arm of said user and portable and compact, said monitor means including sensing means actuated by said monitor means for sensing the heart condition of said user and transmitting means actuated by said monitor means for transmitting at least one radio frequency signal indicative of the sensed heart condition of said user;

base unit means physically separate from said monitor means for receiving said radio frequency signals from said monitor means and for selectively generating an output indication in responses to the detection of said user heart condition problem; and

message delivery means adapted for connection to a telephone network and associated with and actuated by said base unit means for <u>automatically delivering</u> at least one message indicative of a user heart condition problem on a telephone network for summoning emergency assistance when said radio frequency signals indicate said user heart condition problems.

117. A system for monitoring the blood flow status of a user and alerting people to a user heart condition problem when the blood flow status of said user indicates such as problem, comprising:

portable monitor means worn on the arm of the user for monitoring heart conditions of the user and comprising sensing means actuated by said monitor means for sensing the blood flow status of said user, said sensing means comprising an infrared emitter and an infrared detector, and transmitting means actuated by said monitor means for transmitting at least one radio frequency signal indicative of the sensed blood flow status of said user;



base unit means for receiving said radio frequency signals from said monitor means and selectively generating an output indication signal when said radio frequency signals indicate a user heart condition problem, said base unit means physically separate from said monitor means; and

message delivery means connectable to a telephone network and associated with and actuated by said output indication signal of said base unit means for automatically delivering at least one message indicative of a user heart condition problem on said telephone network for summoning emergency assistance when said radio frequency signals indicate said user blood flow status problem.

135. A system for monitoring blood flow status of a user and alerting people to a user heart condition problem when the blood flow status of said user indicates such a problem, comprising:

monitor means for monitoring the blood flow status of the user and transmitting signals indicative of said blood flow status, said monitor means worn on the arm of said user and portable, said monitor means comprising: sensing means actuated by said monitor means for sensing the blood flow status of said user, said sensing means comprising an infrared emitter and an infrared detector; notifying means selectively actuated by said monitor means for providing an indication at the immediate location of said monitor means when said monitor means determines that the user has a specified blood flow status problem; and transmitting means selectively actuated by said monitor means for transmitting at least one radio frequency signal indicative of the sensed blood flow status of said user;

base unit means for receiving said radio frequency signals from said monitor means and selectively generating an output indication signal in responses to said radio frequency signals, said base unit means physically separate from said monitor means;

indicating means associated with and actuated by said output indication signal of said base unit means for providing an indication in a proximate surrounding area of said base unit means when said radio frequency signals transmitted by said monitor means are one of unreceived by said base unit means and received by said base unit means and indicative of a specified blood flow status of said user; and

message delivery means adapted for connection to a telephone network and associated with and actuated by said base unit means for automatically delivering at least one message indicative of a user heart condition problem on said telephone network for summoning emergency assistance when said radio frequency signals indicate said user blood flow status problem.

192. A system for monitoring the heart condition of a user and alerting people to a user heart condition problem, comprising:

portable monitor means for monitoring the heart function of said user and transmitting signals indicative of said heart condition, said monitor means comprising: control means for controlling the operation of the monitor means and determining the existence of any heart condition problem; sensing means connected to and actuated by said control means for sensing the heart condition of said user; diagnostic means connected to said control means for detecting and signalling an operational problem in said monitor means; attachment means for securing said monitor means to the arm of said user; attachment sensing means connected to said attachment means and to said control means for determining and signalling the attachment status of said attachment means with respect to the arm of said user; transmitting means connected to and actuated by said control means for transmitting radio frequency signals indicative of at least one of the sensed heart condition of said user and the operating status of said monitor means; activation means connected to said control means and manually operable by said user for at least one of activating a specified operating status of said monitor means and causing said transmitting means to transmit a predetermined radio frequency signal; and notifying means associated with and actuated by said monitor means for providing an indication at the immediate location of said monitor means when said monitor means determines that said user has a specified heart condition problem said notifying means providing in response at least one of a visual and audible indication;

base unit means for receiving said radio frequency signals from said monitor means analyzing said signals, and selectively producing an output signal upon determination of said user heart condition problem, said base unit means being physically separate

from said monitor means and comprising: diagnostic means for determining a problem with the operation of said base unit means; indicating means actuated by said output signal of said base unit means for providing an indication in a surrounding area of said base unit means when said radio frequency signals transmitted by said monitor means are one of unreceived by said base unit means, and received by said base unit means and indicative of a specified heart condition problem of said user, said indicating means providing in response at least one of a visual and an audible indication information qiving means for providing emergency instructions and information to a caregiver in the event of a downturn in the physiological condition of said user, said information giving means providing verbal instructions on performance of cardiac resuscitation; programming means associated with said base unit means for enabling said user to direct said base unit means to make user-selected customized outputs; and message delivery means associated with and actuated by said base unit means for automatically delivering at least one message on a telephone network, said message being at least one of a prerecorded verbal message indicating a user heart condition problem and summoning emergency assistance when said radio frequency signals indicate said user heart condition problem, and electronic data indicating the operation of said system.

193. A system for monitoring the blood flow status of a user and alerting people to a user heart condition problem when the blood flow status of said user indicates such as problem, comprising:

portable monitor means for monitoring blood flow and transmitting indications of sensed conditions and worn on a limb of said user said monitoring means comprising:

control means for controlling monitoring and transmitting functions of said monitor means:

sensing means connected to and actuated by said control means for sensing the blood flow status of said user and determining any user blood flow status problem, said sensing means and comprising an infrared emitter and an infrared detector;

diagnostic means connected to said control means for detecting and signalling an operational problem in said monitor means;

attachment means for securing said monitor means to the limb of said user;

attachment sensing means connected to said attachment means and said control means for determining and signalling the attachment status of said attachment means with respect to the limb of said user;

transmitting means connected to and actuated by said control means for transmitting radio frequency signals indicative of the sensed blood flow status of said user and the operating status of said monitor means;

activation means connected to said control means manually operable by said user for at least one of activating a specified operating status of said monitor means and causing said transmitting means to transmit a predetermined radio frequency signal; and

notifying means associated with and selectively actuated by said control means for providing an indication at the immediate location of said monitor means when said monitor means determines that said user has a specified blood flow status and said monitor means operates in a specified operating status, said notifying means including at least one of an audible and a visual signal producing device;

base unit means for receiving and said radio frequency signals from said monitor means and analyzing said signals;

diagnostic means associated with said base unit means for determining and signalling a problem with the operation of said base unit means;

indicating means associated with and actuated by said base unit means for providing an indication in a proximate surrounding area of said base unit means when said radio frequency signals transmitted by said monitor means are one of unreceived by said base unit means, and received by said base unit means and indicative of a specified blood flow status of said user, said indicating means including at least one of an audible and a visual indicator;

information giving means associated with said base unit means for providing emergency

instructions and information to a caregiver in the event of a downturn in the physiological condition of said user, said information giving means providing verbal instructions on performance of cardiac resuscitation;

programming means associated with said base unit means for enabling said user to direct said base unit means to make user-selected customized outputs; and

message delivery means associated with and actuated by said base unit means for automatically delivering at least one message an a telephone network, said messgae being at least one of a prerecorded verbal message indicating a user heart condition problem and summoning emergency assistance when said radio frequency signals indicate said user blood flow status problem, and electronic data indicating the operation of said system.

202. A system for monitoring the blood flow status of a user, comprising:

portable monitor means worn on the arm of said user for monitoring blood flow status of said user and transmitting a status signal indicative of said blood flow status, said monitor means comprising sensing means actuated by said monitor means for sensing actual instantaneous blood flow of said user, said sensing means comprising an infrared emitter and an infrared detector; transmitting means associated with and actuated by said monitor means for transmitting at least one radio frequency signal indicative of each sensed blood flow measurement of said user;

base unit means for receiving and analyzing said radio frequency signals, said base unit means being physically separate from said monitor means;

information storage means associated with and actuated by said base unit means for storing each said blood flow measurement indicated by said radio frequency signals;

converting means associated with and actuated by said base unit means for converting the stored pulse rate measurements of said user to signals suitable for transfer on a telephone network; and

message delivery means associated with and actuated by said base unit means and comprising a telephone network connection for automatically delivering electronic data indicative of each said pulse rate measurement of said user on said telephone network.

L4: Entry 12 of 24

File: USPT

Jun 9, 1998

DOCUMENT-IDENTIFIER: US 5764981 A

TITLE: System for batch scheduling of travel-related transactions and batch tasks distribution by partitioning batch tasks among processing resources

## Abstract Text (1):

A data management method and architecture that enables users to integrate central reservation system communications with local accounting and reporting functions. More particularly, the present invention comprises a batch scheduling function that automatically executes predetermined batch tasks and distributes the executable load efficiently among available processing resources. The invention provides significant improvements in environments which require access to mass data storage systems such as the central information repositories used in the travel industry.

# Application Filing Date (1): 19960614

# Brief Summary Text (17):

Another aspect of the present invention is to provide a batch scheduling system that allows reports to be distributed among the available network resources. Once jobs are scheduled, they are executed on a user defined platform or groups of platforms attached to the network. The user can define the available resources to be allocated to each reporting task, can group resources to work on a given reporting task, and designate the priority of each task, as well as the time and date at which the task will be performed. Unlike the prior art, this aspect of the invention allows for the processing power of each platform on the network to be used to its fullest even when no actual users are present.

L4: Entry 6 of 24

File: USPT

Feb 27, 2001

DOCUMENT-IDENTIFIER: US 6195641 B1

TITLE: Network universal spoken language vocabulary

Application Filing Date (1):

19980327

Brief Summary Text (3):

This invention relates generally to the field speech applications, and in particular, to a method and apparatus for automatically storing, tracking and distributing new word pronunciations to speech application clients on a network.

## CLAIMS:

- 5. The system of claim 4, wherein said user profile table also has data therein for each of said users indicative of membership in a work group, each user in said work group receiving the same subset of said central vocabulary list for use in speech recognition.
- 16. The system of claim 11, wherein said user profile data base has data therein for each of said users indicative of membership in a work group, each user in said work group receiving the same subset of said central vocabulary list for use in speech recognition.

L8: Entry 4 of 16

File: USPT

Oct 8, 2002

DOCUMENT-IDENTIFIER: US 6463447 B2

TITLE: Optimizing bandwidth consumption for document <u>distribution</u> over a multicast

enabled wide area network

# Application Filing Date 19981216

# Brief Summary Text (2):

The present invention relates to computer networks used for transmitting and distributing documents in the form of a collection of digital data. More specifically, the present invention relates to a method and apparatus for dynamically and intelligently caching documents at a local site utilizing an agent to filter incoming multicast streams of documents.

## Brief Summary Text (5):

The full potential of the Internet as a medium for communication, education, entertainment and commerce remains unfulfilled due to problems with its performance and reliability. The Internet's performance limitations stem from its basic architecture, which is not optimized for <u>distribution</u> of data-intensive multimedia content. Internet performance is currently limited by the weakest link in the chain between the client and the server. Bottlenecks may be caused by the "last-mile" connection to the user, the infrastructure of the Internet Service Provider (ISP), the gateway to the Internet backbone, or the content provider's Web server. For example, the Internet frequently becomes overloaded when transmitting the same data streams from popular Web site servers to millions of individual users.

# Brief Summary Text (9):

A filtering agent according to a second embodiment of the present invention is disclosed. The filtering agent includes a session identification reading unit that retrieves a session identification from a document multicasted over a multicast channel which identifies the original requester of the document. The filtering agent includes an information classification unit that retrieves published meta data and generates new meta data for each document transmitted with which, in part, it bases its relevance decisions. The filtering agent includes a source unit that retrieves source information from the document. An evaluation unit is coupled to the session identification reading unit, information classification unit, and the source unit. The evaluation unit determines whether the document includes relevant information based on the session identification, data information, the source information, and the channel of distribution. Based on the results of the evaluation unit, the filtering agent either stores the document locally for later use, forwards the document to the original requestor if that user resides within the receiving location's local area network, or discards the document as not relevant to the local users.

# Detailed Description Text (2):

A method and apparatus for optimizing bandwidth utilization for document <u>distribution</u> over a wide area network is disclosed. In the following detailed description, numerous specific details are set forth in order to provide a thorough understanding of the present invention. It would be understood by those skilled in the art that the present invention may be practiced without these specific details. In other instances, well-known methods, procedures, components, and circuits have not been described in detail so as not to obscure the present invention.

### Detailed Description Text (6):

A network operations center 130 is coupled to the local computing resource 110 via connection 120 and the local computing resource 111 via connection 121. The connections 120 and 121 may be implemented individually as a twisted pair telephone line, cable, fiber optics line, satellite transmission, or other connection media. Each connection



120 and 121 may include one of or a combination of the described connection media so long as the connection supports the routing of multicast packets on assigned multicast channels or addresses. The network operations center 130 is also coupled to the Internet 140. The network operations center 130 operates to provide the local computing resources 110 and 111 with access to the Internet 140 and access to network resources. The network operations center 130 may operate as an ISP to the local computing resources 110 and 111. According to an embodiment of the present invention, the network operations center 130 fetches and caches and later on delivers documents from the server 150 to the local computing resources 110 and 111 when requested. The network operations center 130 multicasts documents requested by one of the local computing resource 110 or 111 to the non-requesting local computing resource 110 or 111. By sharing documents that contains relevant information to the non-requesting local computing resource, the network operations center 130 provides the local computing resource 110 and 111 with documents that users on both the local computing resources 110 and 111 are likely or quaranteed to consume at some point of time. Sharing documents allows accessing documents in the network 100 to be more efficient. It also delivers a more responsive user experience and facilitates the delivery of high bandwidth and/or time dependent documents. The local computing resources 110 and 111 filter the incoming documents from the network operations center 130. Before storing and/or forwarding documents received from the network operations center 130, the local computing resources 110 and 111 make sure that the documents are relevant for the purposes of the local computing resources 110 and 111 and there is a probability of used or were transmitted in response to a local user's request. This allows the storage device in the local computing resources 110 and 111 to be used efficiently.

# Detailed Description Text (28):

It should be appreciated that not all the components described in the computer system 400 may be necessary for implementing one of the network operations center 130, a server on the network operations center 130, a local server 230, or a client terminal at the local computing resource 110. The present invention is related to the use of the computer system 400 to filter and distribute documents and data. According to one embodiment, filtering and distributing documents is performed by the computer system 400 in response to the processor 420 executing a sequence of instructions in memory 430. Such instructions may be read into memory 430 from another computer-readable medium, such as data storage device 460, or from another source via the network controller 440. Execution of the sequence of instructions causes the processor 400 to filter a document, as will be described hereafter. In an alternate embodiment, hardwired circuitry may be used in place of or in combination with software instructions to implement the present invention. Thus, the present invention is not limited to any specific combination of hardware circuitry and software.

## CLAIMS:

1. A method comprising: automatically defining a set of preferences for each local computing resource that determines what information is relevant to the local computing resource; receiving a document from a multicast channel, determining if the document includes relevant information by reading published meta tags in the document for meta data, and determining whether the meta data is of interest to the local computing resource; and processing the document if the document includes relevant information.

L8: Entry 6 of 16

File: USPT

May 15, 2001

DOCUMENT-IDENTIFIER: US 6233590 B1

TITLE: Server apparatus for distributed communications supporting multiple

user/application environment

## Application Filing Date (1): 19971205

# Brief Summary Text (7):

While the aforesaid patents teach individual method and apparatus for compressing and decompressing the binary document image data, improving the document data frame memory subsystem performance, and enhancing the visual quality for display or printout of the decompressed document image, none of aforesaid patents have ever directed themselves to the concept and structure of a novel method and apparatus for more generalized computing platform which would interconnect all the data processing machines for enterprise, consumer, and communications, and allow individuals to create, augment, select, interpret, retrieve, update, and present multiple forms of compound document data, including annotated descriptions of sound, image, graphics, and live video sequence in a coherent and effective system architecture which would automatically adjust to each individually available processor and memory bandwidth, capable of communicating in multiple bandwidths to traverse through wide ranges of networks, prioritize each individual complex document data types, and allow for optimum performance for complex document data interpretation and processing.

## Detailed Description Text (7):

It is yet another Applicant's intention to further substantiate a distributed system architecture for DISC, in which a plurality of DISC's can either locally or remotely communicate with each other and other non-DISC apparatus. Regardless of whether other apparatus were analog, digital, hardware, software, or algorithm, the DISC's can encode, forward, decode, and interpret automatically to the available bandwidth, in a totally integrated system environment.

# Detailed Description Text (22):

In a preferred embodiment, the PACK 218 (packet processor) integrated circuit is able to transcode and interpret DISC 112 compound document control signals corresponding to selective standard or proprietary protocols for communications, operating systems, text description, database access and/or database management. PACK 218 can also store, relay, translate DISC 112 compound document data signal into single or plurality of frames, packets, cells, or macroblocks corresponding to said standard or proprietary protocols for inbound or outbound communications. Preferably, the PACK 218 is further able to either locally or remotely communicate with external PACK 218's and to perform point-to-point and point-to-multipoint networking sessions, and to interpret and control single or plurality layered signalling data structure.

 $\frac{\text{Detailed Description Text}}{\text{In a preferred embodiment, the ENC 208 (encoding processor) and the DEC 206 (decoding processor)}$ processor) integrated circuit are able to locally and/or remotely encode and decode the compiled high level language procedural modules corresponding to a single or plurality of selective procedural coding algorithms for direct interpretation, execution and manipulation of the source document content. The DEC 206 and the ENC 208 integrated circuit are also able to locally and/or remotely decode DISC 112 data tokens and encode DISC 112 data signal respectively corresponding to a single or plurality of selective compound document data coding algorithms. Preferably, said DEC 206 and ENC 208 can also select said data and/or procedural coding algorithm employing appropriate mechanisms to meet system performance. More preferably, said DEC 206 and ENC 208 are further able to internally or externally communicate, interface, and perform with single or plurality of software or hardware coprocessor modules.



## Detailed Description Text (120):

Fifthly, application-specific compiler means for selecting the appropriate assembly of class, object, methods, and message from the library and correspond to application-specific run-time requirement from user, application, and network. Said compiler means further comprised of logic means which communicate with the system controller (CON) integrated circuit and select a particular set of system look-up-table (SLUT 232) which meet real time performance requirement for said application.

# <u>Detailed Description Text</u> (133):

As shown in FIG. 2B, FIG. 3, and FIG. 4, the present invention is comprised of the following architectural means, which allows for real time abstraction of the external system and program. Said system abstraction means allows for DISC 112 to perform time-critical microkernel functions for external operating system and database management system and to collaborate with multiple external DISC 112 device for planning and scheduling local and remote procedural calls in enterprise-wide workgroup computing. Said program abstraction means further allows for software developer to prototype and produce direct executable object code with built-in security of selective encapsulation and coding for its high level language source code.

# Detailed Description Text (137):

Fourthly, the means of providing local and/or remote procedural or protocol call processor in CON which collaborate with single or plurality of external DISC 112 devices, wherein said procedural and/or protocol call processor send request signal when the internal functional resource for the forthcoming operation and/or transaction become unavailable, said call processor then hold said operation and/or transaction in wait sate until it further receive acknowledgment signal that identify and/or describe the external available functional resource, said call processor then initiate call set-up procedure with the external DISC 112 device and establish the selective pointer data structure for local activation record, environmental pointers, and the argument and parameters, said call processor further transfer program control to external callee in order to invoke the next operation and/or transaction, said call processor further prepare call termination and return procedures in preparation for the external device to complete the transaction and return program control with resulting data to caller. Said call processor further resume and continue operation and/or transaction after regaining program control.

# Detailed Description Text (150):

These system components are interconnected on-chip through a single or plurality of SYSTEM BUS and CONTROL BUS. The CONTROL BUS allows for SMART 212, CON, BAND 228, and SLUT system controllers to communicate with each other and to transceive control signals to the remanding data path processor including PREP 202, POST 204, FORM 210, ENC 208, DEC 206, EVAL 214, REF 216, PACK 218, and PDB 226. The SYSTEM BUS provides internal data transfer which further comprise a plurality of BUS TRANSFER modes, wherein standard DEFAULT mode allows for PACKET SWITCHED signal transportation of data, control, and operation maintenance packets among various system components, a plurality of CIRCUIT SWITCHED modes also allow for burst transportation of full frame, partial frame, live motion objects, graphics overlay, or other compound DISC 112 data types. Both SYSTEM BUS and CONTROL bus provide bidirectional parallel transfer.

## CLAIMS:

1. A server system for distributed communications which supports a multiple user/application environment, said server system comprising:

user/application system for interfacing and/or supporting a multiple user/application environment;

input/decoding means for receiving an external information and converting said information to a selective internal format;

parsing means connected to said input/decoding means for marking each segment of said information according to its organization, and further providing access to each segment of said information for producing a segmented information;

subject input/evaluation means for receiving a plurality of subject of interest requests from said user/application system; said subject input/evaluation means further connected to said parsing means for receiving said segmented information and performing evaluation in order to determine whether it is relevant to any of said list of subject of interest;



procedure means for producing corresponding high level procedures for communications, database management, or operating system support for distributed processing, storage, retrieval, transmission, or manipulation of said segmented information;

flow control means connected to said procedure means for directing all operation sequences which continue and remain within same segmented information as a normal execution, and directing those operation sequences which require exit from present segmented information as an exception execution;

stack means connected to said flow control means for constructing a normal processing stack and an exception processing stack, wherein said normal processing stack retains all of said normal operation sequences, and said exception processing stack retains all of said exception operation sequences;

execution means connected to said stack means for direct look-up and execution of said normal and said exception processing stack;

change management means connected to said flow control means for predicting the forthcoming exception operation sequence, and look-ahead to perform content switch to the exception processing stack, said change management means further connected to said execution means for direct look up and preparation for forthcoming exception execution during normal execution sequence, and

output/encoding means for transmitting said segmented information to external user/application system, and converting said segmented information according to selective external format directed by said user/application.

L8: Entry 7 of 16

File: USPT

Apr 10, 2001

DOCUMENT-IDENTIFIER: US 6216169 B1

TITLE: Generating reports using distributed workstations

# Application Filing Date (1): 19971006

# Brief Summary Text (4):

Network management is an example of the situation described above. Networks link computers together to allow them to exchange information and communicate with each other over a distance. The networks can be quite large and complex, involving many components and devices that are essential for the services they provide. The tasks of maintaining the network, adding computer resources when needed, reconfiguring the network to support changing patterns of usage and greater user demands, and solving the problems which occasionally occur are typically the responsibility of a network manager. To effectively and efficiently carry out those responsibilities, the network manager must be able to quickly determine how well even the most remote sections of the network are performing and to detect the occurrence of problems or a deterioration in performance that hints at the beginning of more serious problems.

# Brief Summary Text (17):

The invention has the following advantages. The invention <u>distributes</u> the processing of data over many workstations thereby reducing the time required to generate the report. Moreover, larger volumes of data can be processed simply by increasing the number of workstations, i.e., the invention scales with the volume of data to be processed. Also, the invention reduces the volume of data sent from the workstations storing the data to the workstation generating the report. This is because the workstations storing the data partially process the data and then only send the partially processed data (which is more compact) to the workstation generating the report. Furthermore, the processed data used to generate the report is consolidated into a single view or any other form (e.g., multiple views) desired by the user.

# Detailed Description Text (14):

Nodes 14, which are labelled A-C for future reference, are connected to each of the segments 12. The nodes 14 may be PC's, workstations, servers, or any other device of the type that can send and/or receive communications over the network. The nodes communicate with each other over the network using any appropriate communication protocol, e.g., TCP/IP, IPX, Appletalk, or any of the large number of other protocols. The communications are variously called conversations, dialogs, or connections. They can be connection type communications or connectionless communications, also referred to as state and stateless connections, respectively. According to a connection oriented protocol, one party establishes a connection with another party and then that connection is used to send communications between the parties. Whereas, according to a connectionless protocol, one party simply sends datagrams to the other party without first establishing a connection. The present invention applies to all types of systems.

# Detailed Description Text (16):

In the illustrated network, probes 18 are connected to some or all of the segments 10. The probes 18, which are labeled P1 through P3, are monitoring devices which collect and store data relating to the communications traffic over the network. Each probe includes a memory for storing the data that it collects through monitoring the activity (i.e., communications) on the segment of the network to which it is connected. The probes typically collect data in accordance with a known standard. One such standard, which was promulgated by the Internet Engineering Task Force, is referred to as RMON II which stands for Remote Monitoring II standard. RMON II specifies a protocol for communicating with the probe and it specifies the format of the Management Information Base (MIB), which defines the kinds of data that are stored and how to collect and



retrieve that data.

# Detailed Description Text (21):

Often, the network manager desires a report relating only to a subset of elements in the network. For example, if the network manager prepares a report for a company that uses the network, only those elements that send, receive, direct, or carry data for that company are included in the report. In general, the network manager prepares many reports, each of which may relate to a different subset of elements in the network (e.g., elements belonging to different companies that share the network). Each of these subsets defines a group, which is given a group name. The group can include as few as one element and as many as all the elements in the network. Also, a particular element can be a member of more than one group.

## Detailed Description Text (22):

Referring again to FIG. 1., companies A, B, and C each own a number of nodes 14 on the network (which are denoted accordingly in FIG. 1). Segments 12 and routers 16 in the network allow these nodes to communicate with one another. The subset of elements relating to data traffic between the nodes owned by company A (and also including those nodes) defines a group, which we call "group A". Group A includes the segments denoted X, Y, and Z, and the routers denoted as R1, R2, and R3. Group A will also include other elements that are not explicitly shown in FIG. 1. However, segment 14 denoted as W and router 16 denoted as R4 are not elements of group A, since they do not carry or direct data traffic between nodes owned by company A. When preparing a report for company A relating to data traffic between their nodes, the report only includes data relating to the elements in group A.

# Detailed Description Text (27):

Generating a report requires: 1) identifying data relating to elements in a specified group; 2) processing that data to generate information for the report; and 3) producing a display of the information, e.g., a graphical, tabular, or textual display, or any display desired by the network manager. The master workstation distributes the identifying step and part of the processing steps to the remote workstations. Each remote workstation identifies the data stored within it that relates to elements belonging to the specified group, and processes that data. The data processed by each of the remote workstations is then sent to the master workstation, where it is combined and further processed to generate the information for the report.

## Detailed Description Text (28):

Referring to FIG. 2, master workstation 24 includes a digital processor 52, a memory (e.g., a hard disk) 54 and a series of hardware interfaces 56, including a network interface card (NIC card), a video adapter, a printer adapter, and adapters for a keyboard and a mouse. The processor is connected to the memory and the hardware interfaces by at least one bus. The memory stores driver modules 58 for each of the hardware interfaces, a graphical user interface (GUI) module 60, a program 62 for generating reports, and a database 64. The memory also stores a list of all the group names 66 that may be specified by the network manager. The driver modules execute on the processor so that the processor interacts with the hardware devices connected to the workstation. In particular, the processor receives commands from a user using a keyboard and/or mouse, outputs information to a video screen and/or printer, and communicates with other workstations on the network. The GUI module also executes on the processor and provides support for generating detailed graphical displays (e.g., graphs, pie charts, tables, etc.). Program 62, when initiated, causes the processor to perform steps to generate a report. These steps are described below and shown in FIG. 3.

# Detailed Description Text (39):

Referring to FIG. 4, each of the remote workstations, e.g., remote workstation 22, includes a digital processor 152, a memory (e.g., a hard disk) 154 and a series of hardware interfaces 106, including a network interface card (NIC card). At least one bus connects the processor to the memory and the hardware interfaces. The memory stores driver modules 158 for each of the hardware interfaces, a program 166 for generating reports, a database 160 that stores data from probes that monitor a portion of the network, a library 162 that stores at least one group name for every element in the network monitored by the probes, and a library 164 that stores named functions and the algorithms identified by the named functions. The driver module for the NIC card executes on the processor so that the processor can communicate with other workstations on the network. Program 166 executes on the processor and causes the processor in each remote workstation to perform steps involved in generating the report. These steps are described below and shown in FIG. 5.



Detailed Description Text (48):

The described embodiment distributes data storage among a number of remote workstation, and divides processing for report generation among a master workstation and the remote workstations. Distributing the processing among many remote workstations significantly reduces the total time required to prepare a report.

Detailed Description Text (64):

This report determines network-wide health index statistics. For example, it determines the hourly average health index for all segments in the network belonging to the company ABC on a selected day. To generate the report, the master workstation sends a request specifying a named function "network\_wide\_health\_index", the group name "ABC", and the selected day. Upon receiving the request, the processor in each remote workstation identifies the relevant data and determines the hourly health index for each segment monitored by the remote workstation belonging to company ABC. Since the health index is a vector that includes entries relating to different factors such as bandwidth utilization and Ethernet errors, the hourly health index is a matrix. Each column of the matrix, or alternatively, each row of the matrix, is the health index during a particular hour. Then, the processor in each remote workstation adds together the hourly health indices for each segment to give a total hourly health index. Thereafter, the processor in each of the remote workstations returns to the master workstation their respective total hourly health index and the number of segments used to determine that total, i.e., a weight.

L8: Entry 8 of 16

File: USPT

**Generate Collection** 

Nov 14, 2000

DOCUMENT-IDENTIFIER: US 6148337 A

TITLE: Method and system for monitoring and manipulating the flow of private

information on public networks

# Application Filing Date 19980401

# Brief Summary Text (9):

Beyond the above problems inherent to the basic VPN configuration, several common situations exist that only exacerbate these problems. For example, many service providers have public networks that include hardware from multiple vendors. Since each vendor's system typically track only their own data, often with proprietary interfaces, a subscriber may receive network traffic reports for each vendor and be forced to integrate the information themselves. In addition, it is increasingly common for a PVC to stretch across multiple service providers. For example, a company with two geographically remote locations must commonly deal with local service providers at each location, and a long-distance service provider between them. The subscriber may thus receive network traffic reports from each service provider. Other situations which create problems for managing enterprise networks include PVCs with different owners at the two ends (e.g., an extranet with a company at one end and a subsidiary supplier at the other end), multiple PVCs that share a single UNI (e.g., one location with a single UNI and with multiple PVCs), and PVCs composed of multiple fractional PVCs.

# <u>Detailed Description Text (14):</u>

FIG. 1 also illustrates two VPNs, those being Subscriber 1's VPN 110 and Subscriber 2's VPN 120. VPN 110 includes Subscriber Manager Station 112, stations 114, 116, 117, and 119, and UNIs 191 and 192. Each station is one of a variety of network device types, such as a computer or a printer. As is illustrated, Subscriber Manager Station 112 and stations 114 and 116 are part of one LAN, while stations 117 and 119 are part of a separate LAN. Those skilled in the art will appreciate that LANs will typically consist of many more computers than those illustrated. While the two LANs belonging to Subscriber 1 do not have a dedicated private connection between them (e.g., a leased line), computers in the two LANs can communicate with each other via the virtual connection of PVC 142. From the viewpoint of Subscriber 1, station 114 can communicate with station 119 by passing a message to UNI 191, through PVC 142 to UNI 192, and then to station 119.

## Detailed Description Text (18):

After the initial gathering of subscriber network information, MLM 180 continues to periodically retrieve updated network configuration and status information from public network 170. This updated information can be used to identify both new hardware that has been added as well as old hardware temporarily or permanently unavailable. The updated network information will also include status information for resources such as UNIs and PVCs, and can include a variety of other types of information such as resource performance data (e.g., packet counts) and service level agreement data (e.g., whether the public network is meeting agreed-upon levels for network-wide performance such as faults). When MLM 180 receives this updated network information, it again uses the subscriber information to determine which pieces of network information are relevant to which subscribers, and then updates the subscriber domains with the new network information.

L13: Entry 2 of 7 File: USPT Apr 2, 2002

DOCUMENT-IDENTIFIER: US 6366956 B1

\*\* See image for Certificate of Correction \*\*

TITLE: Relevance access of Internet information services

### Abstract Text (1):

The information access monitor is located at the Internet gateway of a network. The information access monitor monitors information flows between the internal data communication network and Internet to identify information requests and responses. The Information Access Monitor generates relevance indexes for these requests and responses and compiles a "corporate consciousness" of all data relevant to the organization. The information access monitor computes user/group profiles to identify information needs and interests within the organization and can then automatically associate users/groups with information of relevance. The users can be advised of information via automated "copy to" lists or can be directed to information in response to the user seeking information. The information accessmention thereby automatically creates "virtual bibliographies" which reflect topics of interest to the users of the system. These virtual bibliographies are continuously created and updated as needed by the users.

# Application Filing Date (1): 19970129

# Brief Summary Text (4):

In a multiuser computer environment, such as on a corporate network, information is generated and consumed by users in all parts of the organization. As part of this process, many individuals access information via Internet, and store the results of their quest in their personal data storage directories. Much of this information is of interest to others in the organization, yet it is not made available to these interested parties absent the searcher forwarding a copy of this information to the interested parties. In addition, there is also information stored on computers within the organization that the searcher may not identify or be able to access. There presently is no single list of information sources or an identification of the contents of these sources available to the members of the organization. Thus, individuals searching for information replicate in part the prior search efforts of others and also do not necessarily disseminate the retrieved information to all those in the organization who have an interest in this information.

# Brief Summary Text (5):

In large organizations, information is generated, distributed, stored and consumed in a manner that fails to ensure that all individuals who have an interest in this information receive copies of the information. Historically, organizations maintained a central library which was the repository of information of a general public nature. In addition, the organization concurrently maintained a corporate records department which stored and maintained the private corporate correspondence and trade secret documents. Thus, when an individual working in the organization desired to obtain information, the search was initially divided between these two types of information. The two libraries of information were cataloged by professional librarians and were relatively simple to search, generally with the assistance of the library staff. With regard to information generated within and by the organization, this information was typically propagated from the author to members of the author's department and to interested individuals in other departments via standard routing lists.

# Brief Summary Text (6):

With the advent of computerized sources of information and the availability of electronic media via which the information can be obtained, this traditional library structure has lost its effectiveness. Individual members of an organization can search for information from diverse sources. The access to these sources is typically via "Internet" which is a world wide link of computers that communicate via commonly



understood protocols. The Internet also functions as a repository of information published by many sources: libraries, corporations, universities, research institutions, organizations, governments, individuals, and the like. A variety of tools are available to the users to access this information from Internet. However, a problem with Internet is that the "search and locate" functions used to obtain information of interest to a user are non-trivial to execute. In particular, the Internet and the search engines used to locate information which is accessible via Internet are somewhat eclectic at best. The users must expend a significant amount of time and effort to locate and retrieve information from the scattered sources of information. From the organization's point of view, this problem is exacerbated by the fact that numerous members of the organization are redundantly searching for information and storing identical information in their private directories on the organization's data storage subsystems. Thus, the entire information library function has devolved from the professionally run organizational libraries of the past to the distributed, disorganized and grossly inefficient electronic data storage procedures of the present.

## Brief Summary Text (7):

Therefore, there presently is no automatic data indexing mechanism available to organizations to address the problem of individual storage of information of relevance to the organization and the absence of any correlation process to enable other members of the organization to benefit from the search efforts of their peers. The information stored on the organization's data storage subsystem is therefore ineffective, even though its availability and pertinence to the organization may be high.

# Brief Summary Text (9):

The above described problems are solved and a technical advance achieved in the field by the Information Access Monitor (IAM) of the present invention. In the preferred embodiment of the invention, the information access monitor is part of a computer system comprising a plurality of interconnected processors. The information access monitor is located at the Internet gateway of the computer system's data communication network. Users access information that is pertinent to their work and to others in their organizations by means of the Internet. The information access monitor therefore functions to monitor information flows between the internal data communication network and Internet to identify these information requests and responses. The information access monitor generates relevance indexes for these requests and responses and compiles a "corporate consciousness" of all data relevant to the organization. The information access monitor computes user/group profiles to identify information needs and interests within the organization and can then automatically associate users/groups with information of relevance. The users can be advised of information retrieved from the Internet by others via information access monitor generated relevance indexes, or by "copy to" lists or they can be directed to pertinent information in response to the user seeking information. The information access monitor thereby automatically creates "virtual bibliographies" which reflect topics of interest to the users of the computer system. These virtual bibliographies are continuously created and updated as needed by the users actions in accessing information through the Internet gateway.

# Detailed Description Text (7):

The information access monitor IAM monitors information flows between the internal data communication network LAN and Internet I to identify these information requests and responses. The information access monitor IAM generates relevance indexes for these requests and responses and compiles a "corporate consciousness" of all data relevant to the organization. The information access monitor IAM computes user/group profiles to identify information needs and interests within the organization and can then automatically associate users/groups with information of relevance. The users can be advised of information retrieved from the Internet I by others via automated "copy to" lists or can be directed to pertinent information in response to the user seeking information. The information access monitor IAM thereby automatically creates "virtual bibliographies" which reflect topics of interest to the users of the computer system H. These virtual bibliographies are continuously created and updated as needed by the users actions in accessing information through the Internet gateway G.

# Detailed Description Text (14):

In contrast to this configuration, the document search engine DSE as shown in FIG. 2 resides on the information access monitor IAM, and functions to index the full text and properties of objects which are stored in the computer system H. This is accomplished by storing any object retrieved from the server processors S1-Sm in a buffer memory (not shown) in the gateway G prior to distribution to the requesting user. While the object is stored in the buffer memory, the document search engine DSE processes the



object to generate a set of indexes for this object. These indexes are stored in index file IF and the physical data storage location on client processor C1 or data storage subsystem DSS is also noted to enable subsequent retrieval of the stored object. Alternatively, the source of the object (such as one of the server processors S1-Sm) can be noted to enable the gateway G to simply retrieve the object from its originating server processor. Alternatively, the document search engine DSE can be implemented in a distributed fashion, on each of the data storage subsystems DSS and client processors C1-Cn which are interconnected to the local area network LAN. In this implementation, the query processing and index storage can be implemented in each distributed processor and the results forwarded to the information access monitor IAM or the indexes can be centrally stored on the information access monitor IAM and the queries processed therein. In either application, the information access monitor IAM functions to directly catalog or direct the cataloging of objects (documents) which are stored in the computer system H on the various client processors C1-Cn and data storage subsystems DSS located therein.

# Detailed Description Text (33):

The control software CS uses the above-noted processes to automatically identify objects which are potentially of interest to users. The control software receives the object profile data for a newly received object, and processes this data to determine the relevance of this object to the users served by computer system H. The control software CS processes the user profile indexes and the user interest summary indexes stored in the database DB to compute the correlation between these indexes and the indexes computed for the received object. If the correlation between these two sets of indexes exceeds a predetermined threshold, then the received object is noted as being of potential relevance to the selected user. At this juncture, the control software CS can store this information for later recall when the selected user initiates a query, or control software CS can transmit information to this selected user to actively identify this received object as being of possible interest. In either case, the control software CS operates independent of the users and functions to anticipate their need for information.

## Detailed Description Text (37):

The information access monitor monitors information flows between the internal data communication network and Internet to identify information requests and responses. The Information Access Monitor generates relevance indexes for these requests and responses and compiles a "corporate consciousness" of all data relevant to the organization. The information access monitor computes user/group profiles to identify information needs and interests within the organization and can then automatically associate users/groups with information of relevance. The users can be advised of information via automated "copy to" lists or can be directed to information in response to the user seeking information. The information access monitor thereby automatically creates "virtual bibliographies" which reflect topics of interest to the users of the system. These virtual bibliographies are continuously created and updated as needed by the users.

### CLAIMS:

1. In an <u>organization having multiple members and an internal data</u> communications network through which the multiple members can access and retrieve objects from the Internet, a method for enhancing efficiencies with which objects retrieved from the Internet are maintained for access by the multiple members, the method comprising:

monitoring information flows between the internal data communications network and the Internet, the monitoring identifying information requests for objects from one or more of the multiple members and responses from the Internet that contain requested objects;

ascertaining the identities of individual members who request and receive objects from the Internet;

determining patterns of information access for one or more of the multiple members;

constructing an object profile for individual objects that are retrieved from the Internet;

developing a listing of one or more objects that are retrieved from the Internet that are likely to be of interest to individual members who did not request the one or more objects, the list being developed by considering object profiles and member patterns of information access; and



presenting the listing to at least one member of the organization.

5. In an organization having multiple members and an internal data communications network through which the multiple members can access and retrieve objects from the Internet, a method for enhancing efficiencies with which objects retrieved from the Internet are maintained for access by the multiple members, the method comprising:

cataloging objects as they are retrieved from the Internet by one or more of the multiple members of the organization, said cataloging being performed by an information access monitor that is positioned at an organization gateway to the Internet through which objects retrieved from the Internet pass;

storing copies of objects in a organization storage sub-system;

constructing an object profile for individual objects that are stored in the storage sub-system;

determining, based upon member profiles and object profiles, which objects stored in the organization storage sub-system might be of interest to other members of the organization who did not cause the objects to be retrieved; and

notifying the other members of objects that might be of interest to them.

8. In an organization having multiple members and an internal data communications network through which the multiple members can access and retrieve objects from the Internet, a method for enhancing efficiencies with which objects retrieved from the Internet are maintained for access by the multiple members, the method comprising:

maintaining index data in an index file, the index <u>data being indicative of objects</u> that are obtained by individual members of the organization from the Internet;

storing objects for which index <u>data</u> is <u>maintained</u> within an organization's internal data communications network storage sub-system;

receiving a member-generated query for one or more objects that can be obtained from the Internet;

executing the member-generated query internally of the organization by using the index file to identify objects that were previously obtained by one or more other members of the organization; and

generating a response to the member from which the query was received that contains indicia of any stored objects that satisfy the member-generated query.

L13: Entry 6 of 7

File: USPT

Feb 14, 1995

DOCUMENT-IDENTIFIER: US 5390247 A

TITLE: Method and apparatus for creating, supporting, and using travelling programs

# Abstract Text (1):

A method and apparatus for creating, supporting and using a "travelling program" is disclosed. A "travelling program" is a digital data structure which includes a seguence of instructions and associated data and which has the capability of determining at least one next destination or recipient for receiving the travelling program and for transmitting itself together with all relevant data determined by the program to the next recipient or destination. The travelling program can compute, according to any algorithm, the digital material which is to be signed, and also, as needed, the digital material which is to be verified. The program can conditionally decide, based on any known criteria, which users should participate in the signature process. Digital signatures allow the travelling program to provide other types of valuable authentication. The travelling program operates to automate data collection among a group of users. It can be sent to one user, attach (or detach) relevant data files and move on to the next user. Data or files, collected from one or more users can be deposited with another user, or accumulated for batched processing as desired. This methodology eliminates the need for individual users to be counted on to transmit all the required data in the required format. The present invention also efficiently performs electronic data interchange (EDI) in the context of a travelling program which sends itself from user to to the next within an organization, collecting, editing and approving data.

## Application Filing Date (1): 19930920

# Brief Summary Text (6):

One prior art methodology for automatically transferring information between users (for example, within an organization) utilizes a so-called "electronic forms" methodology. This "electronic form" methodology presents data to a user, solicits the user's input via a conventional display, verifies that the input data has been correctly entered, and thereafter transmits such data to another user.

# Brief Summary Text (19):

The present invention also efficiently performs electronic document interchange (EDI) in the context of a travelling program which sends itself from user to to the next within an organization, collecting, editing and approving data. At the appropriate point, as determined by the program's logic, it is then able to programmatically generate a standard EDI transaction (e.g., such as the X12 850 Purchase Order Transaction set) for transmission to another organization. The travelling program is able to digitally sign the finished transaction set. Accordingly, any receiving organization which can process the standardized EDI, and the standardized signature will be able to authenticate and process the incoming material, even if the receiving organization does not have all the powerful techniques available which are taught by the present invention.

# Detailed Description Text (4):

As used herein, a "travelling program" is a digital data structure which includes a sequence of instructions and associated data and which has the capability of determining at least one next destination or recipient for receiving the travelling program and for transmitting itself together with all relevant data determined by the program to the next recipient or destination.

Detailed Description Text (188):
Turning first to FIG. 36, the travelling program may need to be split in order, for example, to acquire survey data from a number of different recipients or to collect or



distribute data to a number of different executives in an organization. Initially, the travelling program performs various housekeeping operations to prepare to split 650. Thereafter, variables are set in accordance with particular application requirements, e.g., the survey run by a particular user 652. Destination users are then determined and the traverse function is invoked as per FIGS. 20 and 21 to transmit the image of the programs, the programs variables together with any other appropriate data tailored to the individual recipients 654. The transmitted variables may change from instance 1 (656) to instance 2 (658), instance 3 (660), to instance N (662).

## Detailed Description Text (197):

The present system embeds the X12 data dictionary into the interpreter which may be called as a built-in function. As indicated in block 720, initially a call is made to the X12 subroutine by specifying a segment name and items "XX, YY, WW, . . . ". The program can provide X12 data code for popular common options typical in the organization's environment, so as to build a short list of options in order of normal usage. Examples of such items are, in a purchase order context, item number, part number and quantity. This call will result in a call to the built in data dictionary.

L4: Entry 8 of 24

File: USPT

Jan 18, 2000

DOCUMENT-IDENTIFIER: US 6016478 A

TITLE: Scheduling system with methods for peer-to-peer scheduling of remote users

# <u>Application Filing Date</u> (1): 19960813

# Brief Summary Text (6):

Oftentimes, it is necessary to schedule a group of people for an event, such as a meeting. This is the problem of "group scheduling"—that is, notifying a group of people that a certain event is going to happen and receiving confirmation from members of the group whether each can participate. Conventionally, "group scheduling" has been largely limited to scheduling events for users within a particular "work group."

Typically, a "work group" has comprised those users connected together through a local area network (LAN). Alternatively, a "work group" can be extended to users who can receive messages. In this extended group, however, manual processing on the part of the user is typically required. For instance, for a user who connects from a remote location, the user is required to manually process messages received to manually update the calendaring product to update one's scheduling status information. This leads to two disjointed activities for the user: (1) retrieving messages and (2) entering/processing scheduling information.

# <u>Detailed Description Text</u> (39):

To schedule an event, the user enters the details of the meeting and the list of people he or she wants to invite. The system then <u>automatically notifies</u> the recipients and collects their responses for the user. In addition to electronic messaging, the user can use fax or telephone for group scheduling, for people without e-mail accounts. If the user specifies a fax number for notification, the event invitation is automatically sent using built-in fax software (e.g., Microsoft Fax) and the user's fax modem. Selecting phone notification, on the other hand, puts a reminder in the user's Calls list.

File: DWPI

L4: Entry 24 of 24

Jul 21, 1995

DERWENT-ACC-NO: 1995-286203

DERWENT-WEEK: 200206

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TITLE: Work management control system - receives work processing demand event, notifies generated object to work processing group, and controls execution and processing result using controller

 $\frac{\text{Basic Abstract Text}}{\text{A notice part (22)}} \text{ notifies the generated object to the person in charge or a system}$ resource. A work flow management unit (30) distributes the work processing to different execution modules. A work processing is performed from the static and dynamic information such as correspondence relation of groups, work processing demand, person in charge or system resource. A work flow controller (20) controls the processing.

Basic Abstract Text
ADVANTAGE - Assigns work and notifies work request to different groups, automatically. Performs work processing of each individual in group independently.

# PF Application Date (1):

19931224

PF Application Date (2): 19931224

# WEST

Generate Collection

L26: Entry 3 of 6

File: USPT

Mar 30, 1999

DOCUMENT-IDENTIFIER: US 5889952 A

TITLE: Access check system utilizing cached access permissions

### DEPR:

An advantage of the present invention for access checks is the elimination of the need to open access control lists each time a resource request is processed if a similar request has already been processed. A way to maximize this advantage is to group or cluster users to reduce the number of different user-tokens. For example, a number of users within the same work-group might all be granted the same level of access to the files on server 100. A filter can be applied by the system of the present invention so that when a member of the group logs on to server 100, they are assigned the user-token designated for that group rather than a user-token unique to the individual user. In this fashion, fewer user-tokens are generated and therefore fewer access checks requiring the reading of access control lists are performed.

### DEPR:

A variation of this advantage is to operate the system of the present invention so that a group or class of users log on to server 100 using the same user-name and password and as a result are assigned the same user-token upon logging on. For example, user-name "Anonymous" is assigned to user's placing requests over the internet for resources on server 100. All such users are assigned the same user-token, Token3 in the example of FIGS. 2-4, and the number of access checks performed by server 100 is significantly reduced. Another example is a server that maps each user that logs on to one of several different user names. Each user name to which a logged-on user is mapped might correspond to a work-group, a level of security access, or any other grouping deemed appropriate by the system administrator.